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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,231	07/25/2003	John Erickson	1027.P006USC1	2442
35320	7590 11/27/2006	EXAMINER		INER
ADVANCED NEUROMODULATION SYSTEMS, INC.			KAHELIN, MICHAEL WILLIAM	
6901 PREST PLANO, TX			ART UNIT	PAPER NUMBER
,			3762	
			DATE MAILED: 11/27/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)		
		10/627,231	ERICKSON, JOHN		
· O	office Action Summary	Examiner	Art Unit		
		Michael Kahelin	3762		
	MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address		
Period for Re	•				
WHICHEV - Extensions of after SIX (6) - If NO period - Failure to re Any reply re	ENED STATUTORY PERIOD FOR REPLY ER IS LONGER, FROM THE MAILING DA of time may be available under the provisions of 37 CFR 1.13 MONTHS from the mailing date of this communication. for reply is specified above, the maximum statutory period we ply within the set or extended period for reply will, by statute, ceived by the Office later than three months after the mailing in term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tim  iill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	I. the mailing date of this communication. D (35 U.S.C. § 133).		
Status					
1)⊠ Resp	ponsive to communication(s) filed on <u>12 Ju</u>	ne 2006.			
2a)⊠ This	This action is <b>FINAL</b> . 2b) This action is non-final.				
3) Sinc	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
close	ed in accordance with the practice under <i>E</i>	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.		
Disposition o	f Claims				
4)⊠ Clair	m(s) <u>35-39</u> is/are pending in the application	1.			
4a) C	of the above claim(s) is/are withdraw	vn from consideration.			
5)∐ Clair	m(s) is/are allowed.				
6)⊠ Clair	m(s) <u>35-39</u> is/are rejected.				
	n(s) is/are objected to.				
8)∭ Clair	m(s) are subject to restriction and/or	election requirement.			
Application P	apers				
9) <u></u> The s	specification is objected to by the Examine	г.			
10) ☐ The o	drawing(s) filed on is/are: a) ☐ acce	epted or b) objected to by the I	Examiner.		
Appli	icant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).		
·	acement drawing sheet(s) including the correct				
11) The (	path or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.		
Priority under	r 35 U.S.C. § 119				
	owledgment is made of a claim for foreign  b) Some * c) None of:	priority under 35 U.S.C. § 119(a)	)-(d) or (f).		
1.		s have been received.			
2.			on No		
3.	Copies of the certified copies of the prior				
	application from the International Bureau	ı (PCT Rule 17.2(a)).			
* See th	ne attached detailed Office action for a list	of the certified copies not receive	ed.		
Attachment(s)					
1) Notice of R	eferences Cited (PTO-892)	4) Interview Summary			
	raftsperson's Patent Drawing Review (PTO-948) Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P			
	b)/Mail Date <u>20060117</u> .	6) Other:			

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 2. Claims 35-39 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Examiner was unable to find support in the originally filed application for the limitation of "caus[ing] a patient to experience substantially concurrent application of pulses".

## Claim Rejections - 35 USC § 102

- 3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
  - (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 35-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Acosta et al. (US 7,024,246, hereinafter "Acosta").

- 5. In regards to claim 35, Acosta discloses a neurostimulator having a blocking capacitor (Fig. 18, C1-C8), which generates a first stimulation pulse with a first electrode pattern (Fig. 26), generates a reverse pulse according to the first electrode pattern having a longer pulse width and lower amplitude (Fig. 26, "Program 1"), generates a second stimulation pulse using a second electrode pattern ("Program 3"), the electrode patterns are defined by parameters stored in memory (col. 20, line 60), and the patient experiences substantially concurrent application of pulses because the pulses of Figure 26 are shown to be applied "substantially concurrently".
- 6. In regards to claim 36, the total charge delivered by the first pulse is equal to the charge delivered by the reverse pulse (col. 15, line 29).
- 7. In regards to claim 37, a switching network generates the reverse pulse (col. 9, line 61, 1001, 1003, and 1401-1407).
- 8. In regards to claim 38, the switching networks reverse the electrical connections to output nodes (col. 14, line 30).

## Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

<sup>(</sup>a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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10. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Acosta in view of Archer et al. (US 2002/0077670, hereinafter "Archer"). Acosta discloses the essential features of the claimed invention including applying stimulation without accumulating charge on the blocking capacitors (col. 15, line 1), but does not explicitly disclose that the stimulation frequency is greater than about 250 Hz. Archer teaches of providing nerve tissue with biphasic stimulation of 250 Hz (par. 0056) to provide a stimulation frequency that effectively stimulates nervous tissue. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Acosta's invention by providing biphasic stimulation of 250 Hz to effectively stimulate nervous tissue.

#### Response to Arguments

11. Applicant's arguments with respect to claims 35-39 have been considered but are most in view of the new ground(s) of rejection, necessitated by amendment.

#### Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kahelin whose telephone number is (571) 272-8688. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GEORGE R. EVANISKO PRIMARY EXAMINER

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